AD-A092 777 ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2
12828F LANCE, MISSILE NUMBER 5302, ROUND NUMBER 358-NSL, 2 OCTO--ETC(U)
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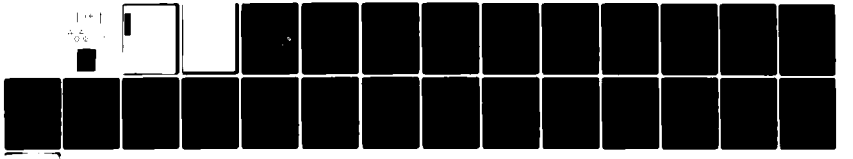

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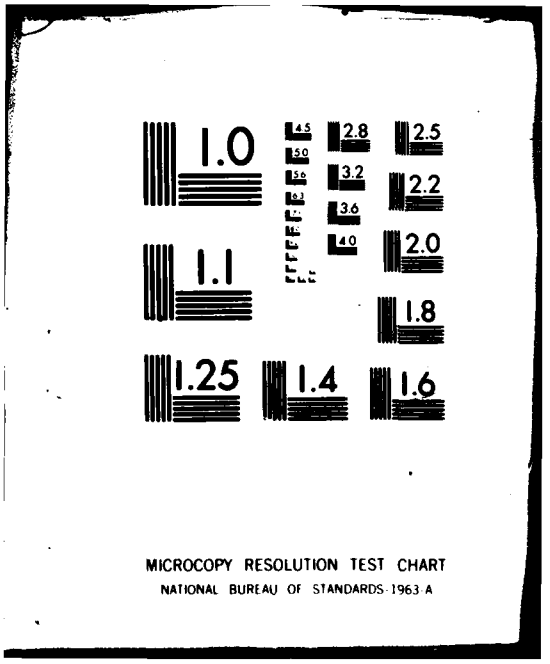
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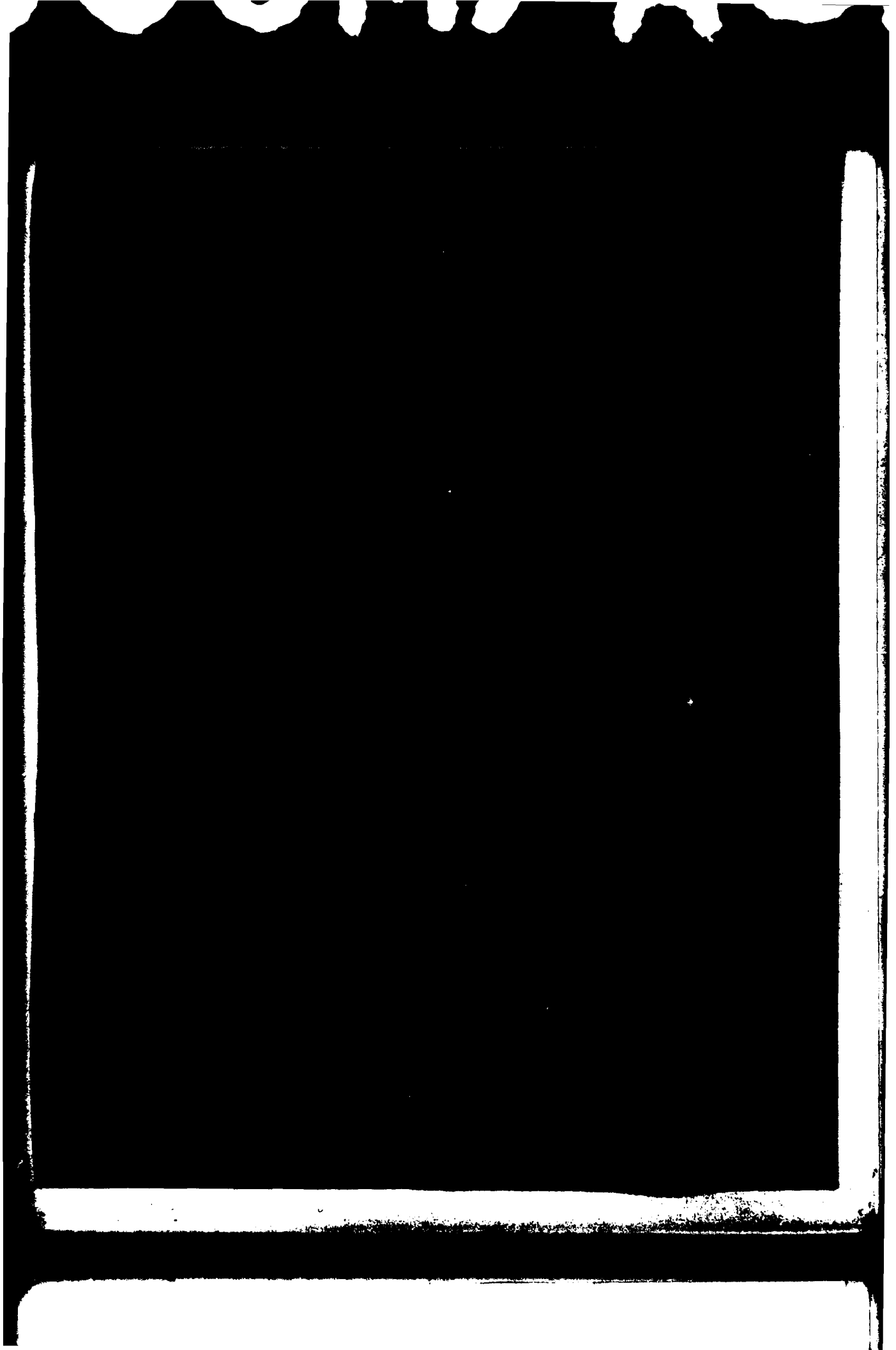

SECURITY CLASSIFICATION OF THIS PAGE *(When Data Entered)*

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
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4. TITLE *(and Subtitle)* 12828F LANCE Missile Number 5302, Round Number 358-NSL,		5. TYPE OF REPORT & PERIOD COVERED 6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) White Sands Meteorological Team		8. CONTRACT OR GRANT NUMBER(s) DA Task 1F665702D127 02
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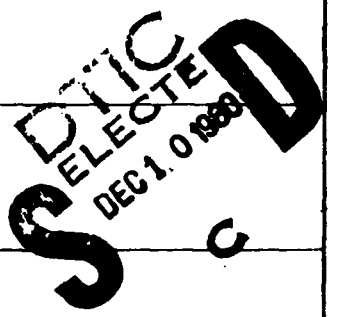


18. SUPPLEMENTARY NOTES

19 KEY WORDS *(Continue on reverse side if necessary and identify by block number)*

20 ABSTRACT *(Continue on reverse side if necessary and identify by block number)*

Meteorological data gathered for the launching of the 12828F LANCE, Missile Number 5302, Round Number 358-NSL are presented in tabular form.

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED
SECURITY CLASSIFICATION OF THIS PAGE *(When Data Entered)*

CONTENTS

INTRODUCTION

12828F LANCE , Missile Number 5302 , Round No. 358-NSL , was launched from LC 33 , White Sands Missile Range [illegible] at 1034 MDT on 2 October 1980 [illegible] 1030 MDT

DISCUSSION

Meteorological data were [illegible] and reduced [illegible] Team, Atmospheric Sciences Laboratory (ASL), [illegible]. The data were obtained by the following methods:

[illegible] tion

[illegible]

(1) standard surface observations [illegible] surface pressure, temperature [illegible], relative humidity, dew point (^{0}C), density [illegible], wind direction and speed, and cloud [illegible] were made at the LC 33 [illegible].

(2) Anemometer data were provided from existing pole [illegible] anemometer at LC-33. Monitor of wind [illegible] anemometer [illegible] provided to the launch control [illegible].

[illegible] Air

(1) Low level wind data were obtained [illegible]

[illegible]

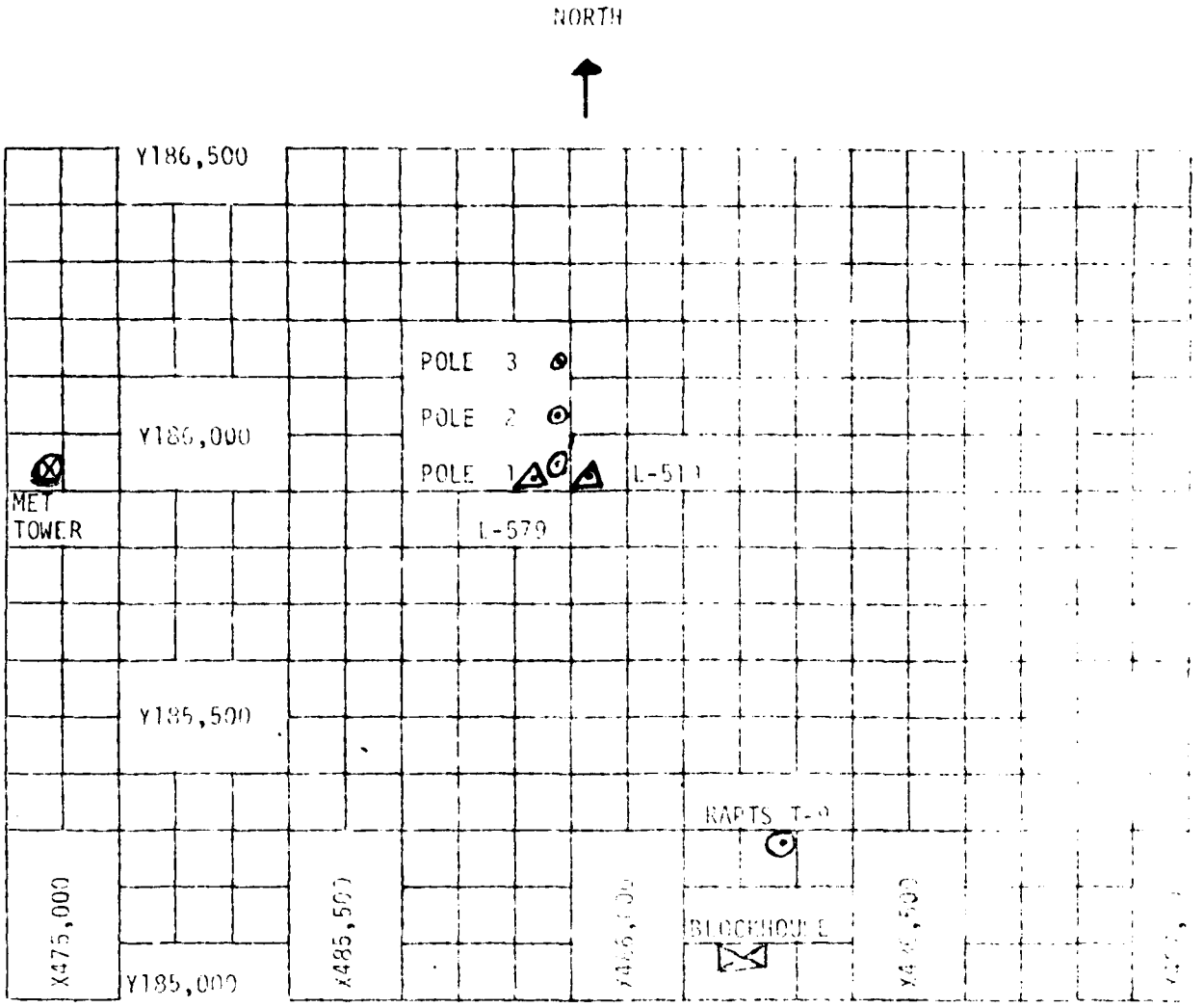
SITE AND ALTITUDE

LC 33 2700 and 3000 Meters

(2) [illegible] (rawinsonde) [illegible] Data were collected from surface to high as possible [illegible] measurements.

SITE AND TIME

WSD 1020 MDT
APA 0900 MDT



1. MET TOWER - 4 Bendix Model T-20 Anemometers at 12 ft, 62 ft, 102 ft, and 202 ft with E/A recorders.

2. POLE ANEMOMETER - Bendix Model T-120 with E/A recorders.

   (a) Pole #1 - 38.7 ft.

   (b) Pole #2 - 53.0 ft.

   (c) Pole #3 - 83.6 ft.

3. RAPTS T-9 Radar Automatic Pilot-Balloon Tracking System T-9 Radar.

TABLE 1. Surfac Observations taken at 1030 MDT, 2 October 1980, at LC-33, 12828F LANCE, Missile Number 5302, Round Number 358-NSL.

ELEVATION	3977.30	FT/MSL
PRESSURE	885.4	MBS
TEMPERATURE	20.3	^{o}C
RELATIVE HUMIDITY	49	%
DEW POINT	9.2	^{o}C
DENSITY	1044	GM/M^3
WIND SPEED	04	KTS
WIND DIRECTION	150	DEGREES
CLOUD COVER	CLEAR	

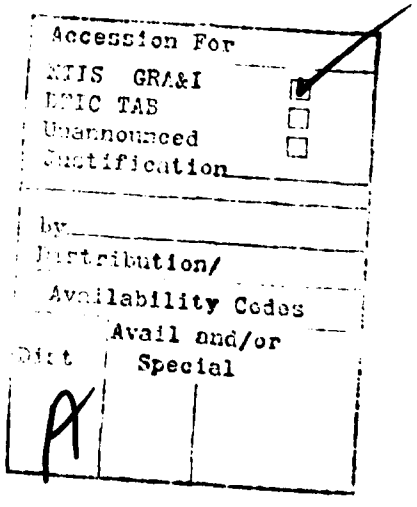


TABLE 2 LC-33 FIXED POLE ANEMOMETER MEASURED WINDS

POLE #1 X485,874.29 Y185,958.90 H4018.74 38.7 ft. AGL			POLE #2 X485,874.93 Y186,012.00 H4033.57 53.0 ft. AGL			POLE #3 X485,877.29 Y186,116.06 H4063.92 83.6 ft. AGL		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	MISG	MISG	-30	108	05	-30	MISG	MISG
-20	MISG	MISG	-20	092	04	-20	MISG	MISG
-10	MISG	MISG	-10	088	03	-10	MISG	MISG
0.0	MISG	MISG	0.0	105	03	0.0	MISG	MISG
+10	MISG	MISG	+10	107	03	+10	MISG	MISG

TABLE 3 LC-33 METEOROLOGICAL TOWER ANEMOMETER MEASURED WINDS (400 FT TOWER)

LEVEL #1, 12 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #2, 62 FEET X484,982.64, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	093	04	-30	109	MISG
-20	112	05	-20	092	MISG
-10	105	04	-10	088	MISG
0.0	085	07	0.0	105	MISG
+10	080	09	+10	107	MISG

LEVEL #3, 102 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #4, 202 FEET X484,982, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	098	07	-30	MISG	MISG
-20	078	07	-20	MISG	MISG
-10	089	08	-10	MISG	MISG
0.0	078	08	0.0	MISG	MISG
+10	078	09	+10	MISG	MISG

PILOT BALLOON MEASURED WIND DATA

TABLE 4

RELEASED FROM LC-33 DATE 2 October 1980 TIME 1020 MDT

COORDINATES (WSTM) X= 486,037.24 Y= 182,350.16 H= 3977.30

NOTE: WIND DIRECTIONS ARE REFERENCED TO SOUTH.

HEIGHTS ARE METERS AGL x OR FEET AGL ____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SUR	150	04
60	150	04
120	150	04
180	150	05
240	150	05
300	151	05
360	150	05
420	145	06
480	140	06
540	136	06
600	132	06
660	129	07
720	124	08
780	119	08
840	115	09
900	112	10
960	110	11
1020	111	12
1080	113	11
1140	114	11
1200	116	11
1260	118	11
1320	120	10
1380	122	09
1440	124	08
1500	128	07
1560	133	06
1620	132	04
1680	129	03
1740	111	01

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
1800	340	01
1860	326	03
1920	326	03
1980	327	03
2040	327	04
2100	328	04
2160	328	04
2220	328	03
2280	328	02
2340	329	01
2400	CALM	CALM
2460	124	01
2520	090	01
2580	074	01
2640	066	01
2700	062	02

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS

PILOT BALLOON MEASURED WIND DATA

TABLE 5

RELEASED FROM LC-33 DATE 2 October 1980 TIME 1030 MDT

COORDINATES (WSTM) X= 486,037.24 Y= 182,350.16 H= 3977.30

NOTE: WIND DIRECTIONS ARE REFERENCED TO SOUTH.

HEIGHTS ARE METERS AGL X OR FEET AGL ____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SUR	146	03
60	137	03
120	127	03
180	117	03
240	108	03
300	099	03
360	094	04
420	097	05
480	098	06
540	099	07
600	100	08
660	101	09
720	103	09
780	105	10
840	107	10
900	109	10
960	110	11
1020	112	11
1080	114	09
1140	118	08
1200	122	06
1260	128	05
1320	126	04
1380	117	03
1440	092	02
1500	035	01
1560	358	02
1620	356	03
1680	356	03
1740	357	03

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
1800	357	04
1860	357	04
1920	003	04
1980	011	03
2040	021	03
2100	031	03
2160	042	03
2220	048	03
2280	055	03
2340	062	03
2400	069	03
2460	071	03
2520	068	03
2580	065	03
2640	062	03
2700	060	03
2760	055	04
2820	052	04
2880	048	04
2940	046	04
3000	043	05

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS

STATION ALTITUDE 3989.00 FEET MSL
2 OCT. 60 1020 HRS MDT
ASCENSION NO. 529

SIGNIFICANT LEVEL DATA
2760[illegible]
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 6

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT
885.4	3089.0	20.3	9.2	49.0
873.4	4375.9	20.2	7.2	43.0
850.0	5142.7	19.0	6.8	48.0
781.0	7499.7	12.1	3.3	55.0
744.6	8817.2	13.1	4.3	55.0
726.2	9508.1	12.1	3.1	54.0
700.0	10519.9	12.1	-6.8	26.0
674.0	11556.9	9.9	-9.7	24.0
582.0	15485.4	-.8	-19.3	23.0
574.2	15839.9	-.1	-24.3	14.0
565.6	16236.9	-.1	-25.2	13.0
500.0	19430.9	-8.4	-31.8	13.0
481.0	20417.6	-9.3	-33.4	12.0
400.0	25021.6	-18.9	-37.7	17.0
342.4	28772.2	-27.0	-45.1	16.0
311.4	30998.3	-32.8	-49.4	17.0
300.0	31858.0	-35.5		
264.4	34708.4	-42.9		
250.0	35946.4	-45.1		
213.3	39376.5	-53.4		
158.0	45567.8	-65.5		
150.0	46609.2	-65.7		
131.8	49182.3	-68.7		
119.4	51131.1	-69.3		
111.0	52558.8	-71.9		
100.0	54588.6	-71.9		
87.8	57132.2	-69.9		
80.4	58877.3	-66.4		
70.0	61632.7	-68.5		
65.8	62869.2	-64.6		
62.4	63935.4	-66.2		
55.4	66355.7	-59.6		

STATION ALTITUDE 3989.00 FEET MSL
2 OCT. 80 1020 HRS MDT
ASCENSION NO. 529

SIGNIFICANT LEVEL DATA
2760020529
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 6 (CONT)

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
50.0	68476.1	-59.4		
39.7	73309.3	-54.0		
35.0	75973.6	-55.6		
30.0	79244.4	-52.6		

UPPER AIR DATA
2760020529
WHITE SANDS

STATION ALTITUDE 3989.00 FEET MSL
2 OCT. 80 1020 HRS MDT
ASCENSION NO. 529

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 7

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
3989.0	885.4	20.3	9.2	49.0	1045.8	669.0	150.0	4.1	1.000284
4000.0	885.1	20.3	9.2	48.8	1045.5	669.0	150.0	4.1	1.000284
4500.0	869.6	19.8	7.2	43.8	1029.3	668.3	148.5	4.5	1.000274
5000.0	854.3	18.4	6.9	47.1	1016.2	666.7	147.3	4.9	1.000271
5500.0	839.2	17.1	6.3	49.1	1002.8	665.2	146.3	5.4	1.000267
6000.0	824.2	15.9	5.6	50.5	989.4	663.7	134.6	5.9	1.000262
6500.0	809.6	14.6	4.9	52.0	976.1	662.2	113.1	7.3	1.000257
7000.0	795.1	13.4	4.1	53.5	963.1	660.7	104.6	7.5	1.000253
7500.0	781.0	12.1	3.3	55.0	950.2	659.2	100.5	6.3	1.000248
8000.0	767.0	12.5	3.7	55.0	931.8	659.7	98.1	4.7	1.000245
8500.0	753.2	12.9	4.1	55.0	913.7	660.2	96.0	2.8	1.000241
9000.0	739.7	12.8	4.0	54.7	897.3	660.2	94.9	2.6	1.000238
9500.0	726.4	12.1	3.1	54.0	883.6	659.3	94.7	2.9	1.000232
10000.0	713.3	12.1	-.9	40.4	868.5	659.0	86.9	2.6	1.000220
10500.0	700.5	12.1	-6.5	26.5	853.8	658.6	73.8	2.3	1.000208
11000.0	687.8	11.1	-8.1	25.1	841.5	657.4	60.6	2.6	1.000203
11500.0	675.4	10.0	-9.5	24.1	829.5	656.1	51.5	3.2	1.000199
12000.0	662.9	8.7	-10.8	23.9	818.2	654.5	60.3	3.1	1.000195
12500.0	650.7	7.3	-12.0	23.8	807.0	652.9	74.4	3.0	1.000192
13000.0	638.6	6.0	-13.2	23.6	796.0	651.3	75.4	3.4	1.000188
13500.0	626.8	4.6	-14.4	23.5	785.2	649.7	74.5	3.8	1.000185
14000.0	615.2	3.2	-15.7	23.4	774.5	648.0	49.7	5.0	1.000181
14500.0	603.8	1.9	-16.9	23.3	764.0	646.4	35.2	6.9	1.000178
15000.0	592.6	.5	-18.1	23.1	753.7	644.8	10.3	8.9	1.000175
15500.0	581.7	-.8	-19.5	22.6	743.3	643.2	355.9	11.8	1.000172
16000.0	570.7	-.1	-24.7	13.6	727.7	643.9	342.1	13.3	1.000166
16500.0	559.9	-.8	-25.7	13.0	715.8	643.1	332.1	15.0	1.000163
17000.0	549.2	-2.1	-26.7	13.0	705.5	641.6	326.6	14.3	1.000161
17500.0	538.7	-3.4	-27.8	13.0	695.3	640.0	321.2	13.6	1.000158
18000.0	528.4	-4.7	-28.8	13.0	685.4	638.5	318.4	12.3	1.000156
18500.0	518.3	-6.0	-29.9	13.0	675.6	636.9	317.5	11.2	1.000153
19000.0	508.4	-7.3	-30.9	13.0	665.9	635.3	324.5	11.2	1.000151

STATION ALTITUDE 3989.00 FEET MSL
2 OCT. 80 1020 HRS MDT
ASCENSION NO. 529

UPPER AIR DATA
276002052
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 7 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
19500.0	498.6	-8.5	-31.9	12.9	656.1	633.9	333.7	11.9	1.000148
20000.0	489.0	-8.9	-32.7	12.4	644.4	633.4	345.3	14.1	1.000146
20500.0	479.4	-9.5	-33.4	12.1	633.2	632.7	353.1	15.4	1.000143
21000.0	469.9	-10.5	-33.8	12.6	623.1	631.4	359.8	15.5	1.000141
21500.0	460.6	-11.6	-34.2	13.2	613.2	630.2	5.5	15.9	1.000138
22000.0	451.5	-12.6	-34.7	13.7	603.5	628.9	10.5	16.5	1.000136
22500.0	442.5	-13.6	-35.1	14.3	593.9	627.7	8.7	17.2	1.000134
23000.0	433.7	-14.7	-35.6	14.8	584.5	626.4	6.0	18.0	1.000132
23500.0	425.1	-15.7	-36.1	15.3	575.2	625.1	3.3	17.3	1.000130
24000.0	416.7	-16.8	-36.6	15.9	566.1	623.9	.4	16.6	1.000128
24500.0	408.4	-17.8	-37.2	16.4	557.1	622.6	.2	16.5	1.000126
25000.0	400.3	-18.9	-37.7	17.0	548.3	621.3	.4	16.4	1.000124
25500.0	392.1	-19.9	-38.7	16.9	539.4	620.0	359.7	16.4	1.000121
26000.0	384.1	-21.0	-39.7	16.7	530.6	618.7	358.8	16.4	1.000119
26500.0	376.2	-22.1	-40.6	16.6	522.0	617.3	358.0	17.0	1.000117
27000.0	368.5	-23.2	-41.6	16.5	513.5	616.0	357.3	17.8	1.000115
27500.0	360.9	-24.3	-42.6	16.3	505.1	614.7	358.3	19.9	1.000113
28000.0	353.5	-25.3	-43.6	16.2	496.9	613.3	359.7	22.4	1.000111
28500.0	346.3	-26.4	-44.5	16.1	488.9	612.0	.3	24.7	1.000110
29000.0	339.1	-27.6	-45.5	16.1	481.0	610.5	.6	26.8	1.000108
29500.0	331.9	-28.9	-46.5	16.3	473.4	608.9	.5	28.0	1.000106
30000.0	324.9	-30.2	-47.5	16.6	465.9	607.3	360.0	28.1	1.000104
30500.0	318.1	-31.5	-48.4	16.8	458.5	605.6	359.7	28.1	1.000103
31000.0	311.4	-32.8	-49.4	17.0**	451.3	604.0	.1	27.5	1.000101
31500.0	304.7	-34.4	-57.9	7.1**	444.5	602.0	.5	27.0	1.000099
32000.0	298.1	-35.9			437.7	600.1	1.3	27.5	1.000097
32500.0	291.6	-37.2			430.4	598.5	2.1	27.9	1.000096
33000.0	285.2	-38.5			423.3	596.8	4.0	27.9	1.000094
33500.0	278.9	-39.8			416.4	595.2	6.1	27.8	1.000093
34000.0	272.8	-41.1			409.5	593.5	6.9	27.9	1.000091
34500.0	266.9	-42.4			402.8	591.8	6.7	28.3	1.000090
35000.0	260.9	-43.4			395.7	590.5	5.7	28.6	1.000088

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3949.00 FEET MSL
2 OCT. 80 1020 HRS MDT
ASCENSION NO. 529

UPPER AIR DATA
27600205.9
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 7 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
35500.0	255.1	-44.3			388.3	589.3	3.1	28.8	1.000086
36000.0	249.4	-45.2			381.2	588.1	.6	29.1	1.000085
36500.0	243.7	-46.4			374.4	586.6	357.2	28.5	1.000083
37000.0	238.1	-47.6			367.8	585.0	353.5	27.8	1.000082
37500.0	232.7	-48.9			361.4	583.4	350.3	27.9	1.000080
38000.0	227.3	-50.1			355.0	581.9	347.7	28.7	1.000079
38500.0	222.1	-51.3			348.8	580.3	346.1	29.6	1.000078
39000.0	217.0	-52.5			342.7	578.7	346.4	30.7	1.000076
39500.0	212.0	-53.6			336.5	577.2	346.6	31.7	1.000075
40000.0	206.9	-54.6			329.9	575.9	346.0	32.5	1.000073
40500.0	202.0	-55.6			323.4	574.6	345.5	33.4	1.000072
41000.0	197.2	-56.6			317.1	573.3	344.8	34.2	1.000071
41500.0	192.4	-57.6			310.9	572.0	344.1	35.0	1.000069
42000.0	187.8	-58.5			304.9	570.7	343.0	35.4	1.000068
42500.0	183.3	-59.5			298.9	569.4	341.1	35.0	1.000067
43000.0	178.9	-60.5			293.1	568.1	339.2	34.7	1.000065
43500.0	174.7	-61.5			287.4	566.8	336.4	33.6	1.000064
44000.0	170.5	-62.4			281.8	565.5	333.4	32.4	1.000063
44500.0	166.4	-63.4			276.4	564.2	330.0	32.2	1.000062
45000.0	162.4	-64.4			271.0	562.9	326.5	33.1	1.000060
45500.0	158.5	-65.4			265.8	561.6	323.3	34.0	1.000059
46000.0	154.6	-65.6			259.5	561.3	320.0	36.4	1.000058
46500.0	150.8	-65.7			253.2	561.1	317.2	38.9	1.000056
47000.0	147.1	-66.2			247.5	560.5	316.9	40.9	1.000055
47500.0	143.4	-66.7			242.1	559.7	319.3	42.1	1.000054
48000.0	139.9	-67.3			236.7	558.9	321.6	43.4	1.000053
48500.0	136.4	-67.9			231.5	558.1	329.9	43.9	1.000052
49000.0	133.0	-68.5			226.4	557.3	338.9	45.2	1.000050
49500.0	129.7	-68.8			221.1	556.9	346.7	47.5	1.000049
50000.0	126.4	-69.0			215.7	556.7	347.6	48.2	1.000048
50500.0	123.3	-69.1			210.5	556.5	348.5	48.9	1.000047
51000.0	120.2	-69.3			205.4	556.3	347.9	48.6	1.000046

UPPER AIR DATA

STATION ALTITUDE 3989.00 FEET MSL
2 OCT. 60 1020 HRS MDT
ASCENSION NO. 529

2760020529
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 7 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
51500.0	117.2	-70.0			200.9	555.3	343.1	46.1	1.000045
52000.0	114.2	-70.9			196.7	554.1	337.9	43.9	1.000044
52500.0	111.3	-71.8			192.6	552.8	335.3	42.9	1.000043
53000.0	108.5	-71.9			187.8	552.7	335.6	42.9	1.000042
53500.0	105.8	-71.9			183.1	552.7	335.9	42.9	1.000041
54000.0	103.1	-71.9			178.4	552.7	337.5	42.4	1.000040
54500.0	100.5	-71.9			173.9,	552.7	339.8	41.7	1.000039
55000.0	97.9	-71.6			169.2	553.1	342.1	41.1	1.000038
55500.0	95.4	-71.2			164.6	553.7	343.1	37.4	1.000037
56000.0	93.0	-70.8			160.2	554.2	344.2	33.5	1.000036
56500.0	90.7	-70.4			155.8	554.7	345.4	29.8	1.000035
57000.0	88.4	-70.0			151.6	555.3	345.7	27.4	1.000034
57500.0	86.2	-69.2			147.2	556.4	346.1	25.0	1.000033
58000.0	84.0	-68.2			142.8	557.8	347.6	23.1	1.000032
58500.0	81.9	-67.2			138.6	559.1	352.1	23.2	1.000031
59000.0	79.9	-66.5			134.7	560.0	356.5	23.4	1.000030
59500.0	77.9	-66.9			131.6	559.5	.1	23.6	1.000029
60000.0	76.0	-67.3			128.6	559.0	2.4	23.9	1.000029
60500.0	74.1	-67.6			125.6	558.5	4.6	24.1	1.000028
61000.0	72.3	-68.0			122.7	558.0	7.3	23.4	1.000027
61500.0	70.5	-68.4			119.9	557.5	11.5	21.0	1.000027
62000.0	68.7	-67.3			116.3	558.9	16.7	18.8	1.000026
62500.0	67.0	-65.8			112.6	561.0	21.5	16.6	1.000025
63000.0	65.4	-64.8			109.3	562.3	24.8	14.2	1.000024
63500.0	63.8	-65.5			107.0	561.3	29.4	12.0	1.000024
64000.0	62.2	-66.0			104.6	560.7	28.0	10.3	1.000023
64500.0	60.7	-64.7			101.4	562.5	15.0	9.6	1.000023
65000.0	59.2	-63.3			98.3	564.4	1.6	9.4	1.000022
65500.0	57.8	-61.9			95.3	566.2	356.9	9.2	1.000021
66000.0	56.4	-60.6			92.4	568.0	359.4	8.8	1.000021
66500.0	55.0	-59.6			89.7	569.3	2.2	8.4	1.000020
67000.0	53.7	-59.5			87.6	569.4	8.7	8.0	1.000020

STATION ALTITUDE 3989.00 FEET MSL
2 OCT. 80 1020 HRS MDT
ASCENSION NO. 529

UPPER AIR DATA
2760020529
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 7 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
67500.0	52.4	-59.5			85.5	569.4	17.2	7.8	1.000019
68000.0	51.2	-59.4			83.4	569.5	26.1	7.7	1.000019
68500.0	49.9	-59.4			81.4	569.6	27.5	6.9	1.000018
69000.0	48.8	-58.8			79.3	570.4	26.9	5.9	1.000018
69500.0	47.6	-58.3			77.2	571.1	26.2	5.0	1.000017
70000.0	46.5	-57.7			75.2	571.8	25.1	4.5	1.000017
70500.0	45.4	-57.1			73.2	572.6	23.9	4.1	1.000016
71000.0	44.3	-56.6			71.3	573.3	22.3	3.7	1.000016
71500.0	43.3	-56.0			69.4	574.1	18.6	3.4	1.000015
72000.0	42.3	-55.5			67.6	574.8	14.1	3.3	1.000015
72500.0	41.3	-54.9			65.9	575.5	9.2	3.1	1.000015
73000.0	40.3	-54.3			64.1	576.3	14.4	3.6	1.000014
73500.0	39.3	-54.1			62.6	576.6	19.5	4.3	1.000014
74000.0	38.4	-54.4			61.2	576.2	23.3	5.0	1.000014
74500.0	37.5	-54.7			59.8	575.8	34.9	5.4	1.000013
75000.0	36.6	-55.0			58.5	575.4	47.6	6.0	1.000013
75500.0	35.8	-55.3			57.2	575.0	57.8	6.8	1.000013
76000.0	35.0	-55.6			56.0	574.6	81.1	6.2	1.000012
76500.0	34.1	-55.1			54.6	575.2	115.1	6.8	1.000012
77000.0	33.3	-54.7			53.2	575.9	137.7	9.1	1.000012
77500.0	32.6	-54.2			51.8	576.5			1.000012
78000.0	31.8	-53.7			50.5	577.1			1.000011
78500.0	31.1	-53.3			49.2	577.7			1.000011
79000.0	30.3	-52.8			48.0	578.3			1.000011

STATION ALTITUDE 3989.00 FEET MSL
2 OCT. 80 1020 HRS MDT
ASCENSION NO. 529

MANDATORY LEVELS
2760020529
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 8

PRESSURE	GEOPOTENTIAL	TEMPERATURE		REL.HUM.	WIND DATA	
		AIR	DEWPOINT	PERCENT	DIRECTION	SPEED
MILLIBARS	FEET	DEGREES	CENTIGRADE		DEGREES(TN)	KNOTS
850.0	5139.	18.0	6.8	48.	147.0	5.1
800.0	6830.	13.8	4.4	53.	105.8	7.9
750.0	8610.	12.9	4.1	55.	95.1	2.4
700.0	10509.	12.1	-6.8	26.	73.4	2.3
650.0	12528.	7.3	-12.1	24.	75.5	2.9
600.0	14665.	1.4	-17.3	23.	25.0	7.5
550.0	16948.	-2.0	-26.7	13.	327.0	14.4
500.0	19403.	-8.4	-31.8	13.	331.5	11.6
450.0	22066.	-12.8	-34.7	14.	11.0	16.7
400.0	24979.	-18.9	-37.7	17.	.4	16.4
350.0	28198.	-25.9	-44.0	16.	.1	23.6
300.0	31794.	-35.5			1.1	27.3
250.0	35867.	-45.1			.9	29.1
200.0	40634.	-56.0			345.2	33.7
175.0	43306.	-61.4			336.5	33.6
150.0	46482.	-65.7			316.8	39.4
125.0	50082.	-69.0			348.0	48.5
100.0	54419.	-71.9			340.1	41.6
80.0	58781.	-66.5			356.0	23.3
70.0	61420.	-68.5			12.5	20.5
60.0	64492.	-64.0			10.2	9.4
50.0	68218.	-59.4			27.5	7.0
40.0	72858.	-54.2			15.7	3.8
30.0	78905.	-52.6				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3951.40 FEET MSL
2 OCT. 80 0900 HRS MDT
ASCENSION NO. 41

SIGNIFICANT LEVEL DATA
2760050041
APACHE
TABLE 9

GEODETIC COORDINATES
32.62700 LAT DEG
106.39352 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT
885.8	3951.4	19.8	6.2	41.0
850.0	5113.3	17.3	3.6	40.0
814.0	6322.0	15.0	3.8	47.0
804.2	6660.4	17.0	6.2	49.0
773.4	7757.4	18.0	6.2	46.0
744.7	8814.0	13.9	4.2	52.0
721.4	9694.2	13.0	2.8	50.0
700.0	10525.1	12.0	.1	44.0
641.4	12904.8	5.8	-8.5	35.0
590.8	15095.7	1.0	-19.4	20.0
574.2	15849.5	1.7	-23.7	13.0
500.0	19447.3	-8.3	-30.2	15.0
472.0	20913.1	-10.1	-31.7	15.0
435.6	22933.0	-13.9	-34.8	15.0
400.0	25045.9	-18.2	-36.6	18.0
300.0	31901.7	-33.8	-49.3	19.0
250.0	36017.1	-44.5		
234.0	37464.1	-48.3		
224.2	38389.6	-49.6		
200.0	40823.6	-55.1		
183.2	42654.7	-58.8		
150.0	46738.0	-64.5		
125.6	50280.0	-68.7		
122.2	50823.1	-67.9		
109.2	53041.3	-70.2		
100.0	54763.7	-71.1		
91.4	56530.4	-68.7		
85.8	57780.0	-68.7		
77.8	59730.0	-65.5		
70.0	61946.4	-66.5		
64.8	63490.1	-63.6		
60.2	64930.6	-64.2		

STATION ALTITUDE 3951.40 FEET MSL
2 OCT. 80 0900 HRS MDT
ASCENSION NO. 41

SIGNIFICANT LEVEL DATA
276005041
APACHE

GEODETIC COORDINATES
32.62700 LAT DEG
106.39352 LON DEG

TABLE 9 (CONT)

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
50.0	68706.2	-57.3		
30.0	79523.8	-51.6		

STATION ALTITUDE 3951.40 FEET MSL
2 OCT. 60 0900 HRS MDT
ASCENSION NO. 41

UPPER AIR DATA
2760056041
APACHE

GEODETIC COORDINATES
32.62700 LAT DEG
106.39352 LON DEG

TABLE 10

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
3951.4	885.8	19.8	6.2	41.0	1049.1	668.1	300.0	12.0	1.000276
4000.0	884.3	19.7	6.1	41.0	1047.7	668.0	301.2	12.1	1.000275
4500.0	868.7	18.6	5.0	40.5	1033.3	666.7	313.1	13.0	1.000269
5000.0	853.4	17.5	3.8	40.1	1019.1	665.4	323.0	14.3	1.000263
5500.0	838.3	16.6	3.7	42.2	1004.4	664.3	331.1	16.0	1.000260
6000.0	823.4	15.6	3.8	45.1	989.7	663.2	337.1	17.4	1.000257
6500.0	808.8	16.1	5.1	48.1	970.3,	663.9	337.3	12.5	1.000256
7000.0	794.5	17.3	6.2	48.1	948.6	665.5	338.9	7.4	1.000254
7500.0	780.5	17.8	6.2	46.7	930.4	666.0	354.4	2.0	1.000250
8000.0	766.7	17.1	5.8	47.4	916.2	665.2	113.9	2.3	1.000246
8500.0	753.1	15.1	4.8	50.2	906.2	662.9	125.1	5.2	1.000241
9000.0	739.7	13.7	5.9	51.6	894.6	661.2	139.8	3.9	1.000237
9500.0	726.5	13.2	3.1	50.4	880.3	660.6	172.0	2.9	1.000232
10000.0	713.4	12.6	1.9	47.8	866.5	659.8	214.0	4.0	1.000226
10500.0	700.6	12.0	.2	44.2	853.0	659.0	225.6	5.0	1.000219
11000.0	687.9	10.8	-1.5	42.2	841.5	657.4	219.5	4.1	1.000213
11500.0	675.4	9.5	-3.3	40.3	830.3	655.8	224.8	2.6	1.000208
12000.0	663.1	8.2	-5.1	38.4	819.2	654.2	273.5	1.2	1.000202
12500.0	651.0	6.9	-7.0	36.5	808.2	652.6	347.4	2.2	1.000198
13000.0	639.1	5.6	-8.9	34.3	797.3	651.0	3.1	4.2	1.000193
13500.0	627.2	4.5	-11.2	30.9	785.8	649.7	8.9	5.8	1.000188
14000.0	615.6	3.4	-13.6	27.5	774.4	648.3	9.2	7.8	1.000183
14500.0	604.1	2.3	-16.1	24.1	763.2	646.9	4.2	10.3	1.000179
15000.0	592.9	1.2	-18.9	20.7	752.2	645.6	357.5	12.0	1.000174
15500.0	581.8	1.4	-21.5	16.2	737.8	645.7	348.8	13.2	1.000170
16000.0	570.9	1.3	-24.0	13.1	724.3	645.6	340.6	13.5	1.000166
16500.0	560.0	-.1	-24.9	13.4	714.1	643.9	330.9	12.9	1.000163
17000.0	549.3	-1.5	-25.7	13.6	704.1	642.3	321.5	12.7	1.000161
17500.0	538.9	-2.9	-26.6	13.9	694.3	640.6	314.7	12.5	1.000158
18000.0	528.6	-4.3	-27.6	14.2	684.6	638.9	309.7	12.2	1.000156
18500.0	518.6	-5.7	-28.5	14.5	675.1	637.3	307.1	11.6	1.000153
19000.0	508.7	-7.1	-29.4	14.8	665.7	635.6	306.2	10.7	1.000151

STATION ALTITUDE 3951.40 FEET MSL
2 OCT. 80 0900 HRS MDT
ASCENSION NO. 41

UPPER AIR DATA
2760050041
APACHE

GEODETIC COORDINATES
32.62700 LAT DEG
106.39352 LON DEG

TABLE 10 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
19500.0	499.0	-8.4	-30.3	15.0	656.2	634.0	307.2	9.6	1.000149
20000.0	489.3	-9.0	-30.8	15.0	645.0	633.3	316.6	9.7	1.000146
20500.0	479.7	-9.6	-31.3	15.0	633.9	632.6	324.3	10.8	1.000144
21000.0	470.4	-10.3	-31.9	15.0	623.1	631.8	330.4	12.2	1.000141
21500.0	461.1	-11.2	-32.6	15.0	613.1	630.6	338.6	12.9	1.000139
22000.0	452.1	-12.1	-33.4	15.0	603.2	629.5	346.9	14.1	1.000136
22500.0	443.2	-13.1	-34.2	15.0	593.5	628.3	355.1	15.8	1.000134
23000.0	434.4	-14.0	-34.9	15.1	583.9	627.2	357.4	16.9	1.000132
23500.0	425.7	-15.1	-35.3	15.8	574.5	626.0	357.4	17.6	1.000130
24000.0	417.2	-16.1	-35.7	16.5	565.3	624.7	355.0	17.8	1.000128
24500.0	408.9	-17.1	-36.1	17.2	556.2	623.5	352.1	18.0	1.000125
25000.0	400.7	-18.1	-36.6	17.9	547.2	622.2	349.2	18.9	1.000123
25500.0	392.5	-19.2	-37.4	18.1	538.3	620.9	346.6	20.0	1.000121
26000.0	384.3	-20.4	-38.3	18.1	529.5	619.5	346.0	21.4	1.000119
26500.0	376.3	-21.5	-39.3	18.2	520.9	618.1	345.6	22.7	1.000117
27000.0	368.5	-22.6	-40.2	18.3	512.4	616.7	347.0	23.7	1.000115
27500.0	360.9	-23.8	-41.1	18.4	504.0	615.2	348.6	24.5	1.000113
28000.0	353.4	-24.9	-42.0	18.4	495.8	613.8	351.1	25.1	1.000111
28500.0	346.0	-26.1	-43.0	18.5	487.8	612.4	353.2	25.6	1.000109
29000.0	338.8	-27.2	-43.9	18.6	479.9	611.0	354.7	26.2	1.000108
29500.0	331.8	-28.3	-44.8	18.6	472.1	609.6	355.1	26.7	1.000106
30000.0	324.9	-29.5	-45.7	18.7	464.5	608.2	353.4	27.0	1.000104
30500.0	318.2	-30.6	-46.7	18.8	457.0	606.7	351.5	27.3	1.000102
31000.0	311.6	-31.7	-47.6	18.9	449.6	605.3	349.4	27.7	1.000101
31500.0	305.1	-32.9	-48.6	18.9	442.3	603.9	348.8	28.2	1.000099
32000.0	298.7	-34.1	-49.7	18.5**	435.2	602.4	350.3	28.5	1.000097
32500.0	292.2	-35.4	-52.0	16.2**	428.0	600.8	352.3	28.8	1.000096
33000.0	285.8	-36.7	-54.3	13.9**	420.9	599.1	354.8	29.3	1.000094
33500.0	279.5	-38.0	-56.8	11.6**	414.0	597.5	356.0	30.7	1.000092
34000.0	273.4	-39.3	-59.6	9.3**	407.1	595.8	356.5	32.7	1.000091
34500.0	267.4	-40.6	-62.8	7.0**	400.5	594.2	355.9	33.2	1.000089
35000.0	261.5	-41.9	-66.7	4.7**	393.9	592.5	354.9	32.9	1.000088

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

UPPER AIR DATA

STATION ALTITUDE 3951.40 FEET MSL
2 OCT. 80 0900 HRS MDT
ASCENSION NO. 41

2760850041
APACHE

GEODETIC COORDINATES
32.62700 LAT DEG
106.39352 LON DEG

TABLE 10 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
35500.0	255.8	-43.2	-72.3	2.4**	387.4	590.8	353.2	31.8	1.000086
36000.0	250.2	-44.5	-93.0	.1**	381.1	589.1	350.7	30.2	1.000085
36500.0	244.5	-45.8			374.7	587.5	348.2	29.9	1.000083
37000.0	239.0	-47.1			368.3	585.8	345.9	30.7	1.000082
37500.0	233.6	-48.4			362.0	584.1	343.8	31.4	1.000081
38000.0	228.3	-49.1			354.9	583.2	341.8	32.0	1.000079
38500.0	223.0	-49.8			348.0	582.2	340.5	33.0	1.000078
39000.0	217.9	-51.0			341.6	580.7	339.5	34.0	1.000076
39500.0	212.8	-52.1			335.4	579.2	338.5	33.9	1.000075
40000.0	207.9	-53.2			329.3	577.7	337.6	33.6	1.000073
40500.0	203.1	-54.4			323.3	576.2	336.5	32.9	1.000072
41000.0	198.3	-55.5			317.4	574.8	335.4	32.1	1.000071
41500.0	193.6	-56.5			311.3	573.5	335.8	32.1	1.000069
42000.0	189.0	-57.5			305.3	572.1	336.6	32.2	1.000068
42500.0	184.6	-58.5			299.5	570.8	334.9	31.9	1.000067
43000.0	180.1	-59.3			293.4	569.7	332.6	31.5	1.000065
43500.0	175.8	-60.0			287.2	568.8	329.1	32.3	1.000064
44000.0	171.5	-60.7			281.2	567.9	325.5	33.6	1.000063
44500.0	167.4	-61.4			275.3	566.9	323.4	35.2	1.000061
45000.0	163.3	-62.1			269.6	566.0	321.7	36.9	1.000060
45500.0	159.4	-62.8			263.9	565.1	319.8	38.1	1.000059
46000.0	155.5	-63.5			258.4	564.1	317.8	39.2	1.000058
46500.0	151.8	-64.2			253.0	563.2	316.8	40.1	1.000056
47000.0	148.0	-64.8			247.5	562.3	316.2	40.8	1.000055
47500.0	144.4	-65.4			242.1	561.5	318.3	42.2	1.000054
48000.0	140.8	-66.0			236.8	560.7	321.6	44.1	1.000053
48500.0	137.3	-66.6			231.6	559.9	325.1	45.9	1.000052
49000.0	133.9	-67.2			226.5	559.1	328.7	47.5	1.000050
49500.0	130.6	-67.8			221.5	558.3	331.4	49.0	1.000049
50000.0	127.4	-68.4			216.7	557.5	333.0	49.8	1.000048
50500.0	124.2	-68.4			211.3	557.5	334.5	50.5	1.000047
51000.0	121.1	-68.1			205.7	557.9	335.1	47.4	1.000046

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STATION ALTITUDE 3951.40 FEET MSL
2 OCT. 80 0900 HRS MDT
ASCENSION NO. 41

UPPER AIR DATA
2760050041
APACHE

GEODETIC COORDINATES
32.62700 LAT DEG
106.39352 LON DEG

TABLE 10 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
51500.0	118.1	-68.6			201.1	557.2	335.9	44.2	1.000045
52000.0	115.1	-69.1			196.6	556.5	337.4	39.6	1.000044
52500.0	112.2	-69.6			192.1	555.8	339.4	34.8	1.000043
53000.0	109.4	-70.2			187.8	555.1	334.8	35.9	1.000042
53500.0	106.7	-70.4			183.3	554.7	328.8	39.5	1.000041
54000.0	104.0	-70.7			178.9	554.3	326.8	43.2	1.000040
54500.0	101.4	-71.0			174.6	554.0	326.9	46.6	1.000039
55000.0	98.8	-70.8			170.1	554.2	328.3	47.3	1.000038
55500.0	96.3	-70.1			165.3	555.1	332.6	43.0	1.000037
56000.0	93.9	-69.4			160.6	556.1	337.5	38.9	1.000036
56500.0	91.5	-68.7			156.0	557.0	337.5	34.8	1.000035
57000.0	89.3	-68.7			152.1	557.0	337.5	30.6	1.000034
57500.0	87.0	-68.7			148.3	557.0	337.5	28.9	1.000033
58000.0	84.9	-68.3			144.3	557.5	337.5	27.7	1.000032
58500.0	82.8	-67.5			140.2	558.7	339.8	26.5	1.000031
59000.0	80.7	-66.7			136.2	559.8	344.6	25.2	1.000030
59500.0	78.7	-65.9			132.3	560.9	350.5	23.8	1.000029
60000.0	76.8	-65.6			128.9	561.2	.3	21.4	1.000029
60500.0	74.9	-65.9			125.8	560.9	12.1	19.9	1.000028
61000.0	73.0	-66.1			122.9	560.6	23.7	17.4	1.000027
61500.0	71.2	-66.3			120.0	560.3	38.2	15.5	1.000027
62000.0	69.5	-66.2			116.9	560.4	47.9	15.3	1.000026
62500.0	67.8	-65.3			113.6	561.7	46.6	16.0	1.000025
63000.0	66.1	-64.3			110.3	562.9	45.3	16.8	1.000025
63500.0	64.5	-63.6			107.2	563.9	33.8	16.2	1.000024
64000.0	62.9	-63.8			104.7	563.6	21.1	16.3	1.000023
64500.0	61.4	-64.0			102.2	563.4	10.0	15.9	1.000023
65000.0	59.9	-64.0			99.7	563.4	358.8	14.6	1.000022
65500.0	58.4	-63.1			96.9	564.6	346.0	13.9	1.000022
66000.0	57.0	-62.2			94.2	565.8	345.7	14.8	1.000021
66500.0	55.7	-61.3			91.5	567.0	346.7	15.8	1.000020
67000.0	54.3	-60.4			89.0	568.3	347.9	16.6	1.000020

UPPER AIR DATA

STATION ALTITUDE 3951.40 FEET MSL
2 OCT. 80 0900 HRS MDT
ASCENSION NO. 41

2760050041
APACHE

GEODETIC COORDINATES
32.62700 LAT DEG
106.39352 LON DEG

TABLE 10 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
67500.0	53.0	-59.5			86.4	569.5	349.9	17.0	1.000019
68000.0	51.7	-58.6			84.0	570.7	351.8	17.4	1.000019
68500.0	50.5	-57.7			81.7	571.9	353.2	15.1	1.000018
69000.0	49.3	-57.1			79.5	572.6	355.1	12.1	1.000018
69500.0	48.2	-56.9			77.6	572.9	358.1	9.2	1.000017
70000.0	47.0	-56.6			75.7	573.3	3.1	6.9	1.000017
70500.0	45.9	-56.4			73.8	573.6	12.7	4.8	1.000016
71000.0	44.9	-56.1			72.0	574.0	31.9	3.8	1.000016
71500.0	43.8	-55.8			70.2	574.3	51.0	4.1	1.000016
72000.0	42.8	-55.6			68.5	574.7	65.7	4.8	1.000015
72500.0	41.8	-55.3			66.8	575.0	65.6	5.0	1.000015
73000.0	40.8	-55.0			65.2	575.4	63.2	5.0	1.000015
73500.0	39.9	-54.8			63.6	575.7	60.2	5.1	1.000014
74000.0	38.9	-54.5			62.0	576.0	53.7	5.2	1.000014
74500.0	38.0	-54.2			60.5	576.4	47.6	5.4	1.000013
75000.0	37.1	-54.0			59.0	576.7	41.7	5.5	1.000013
75500.0	36.3	-53.7			57.6	577.1	35.0	5.4	1.000013
76000.0	35.4	-53.5			56.2	577.4	28.1	5.4	1.000013
76500.0	34.6	-53.2			54.8	577.8	31.3	4.9	1.000012
77000.0	33.8	-52.9			53.5	578.1	44.0	4.2	1.000012
77500.0	33.0	-52.7			52.2	578.5	60.3	3.8	1.000012
78000.0	32.2	-52.4			50.9	578.8			1.000011
78500.0	31.5	-52.1			49.6	579.2			1.000011
79000.0	30.8	-51.9			48.4	579.5			1.000011
79500.0	30.0	-51.6			47.2	579.9			1.000011

STATION ALTITUDE 3951.40 FEET MSL
2 OCT. 80 0900 HRS MDT
ASCENSION NO. 41

MANDATORY LEVELS
27600500041
APACHE

GEODETIC COORDINATES
32.62700 LAT DEG
106.39352 LON DEG

TABLE 11

PRESSURE	GEOPOTENTIAL	TEMPERATURE		REL.HUM.	WIND DATA	
		AIR	DEWPOINT	PERCENT	DIRECTION	SPEED
MILLIBARS	FEET	DEGREES	CENTIGRADE		DEGREES(TN)	KNOTS
850.0	5110.	17.3	3.6	40.	325.0	14.7
800.0	6802.	17.1	6.2	49.	337.7	9.5
750.0	8609.	14.7	4.6	51.	127.2	5.1
700.0	10515.	12.0	.1	44.	225.4	5.0
650.0	12532.	6.7	-7.1	36.	349.6	2.3
600.0	14669.	1.9	-17.1	23.	3.0	11.2
550.0	16961.	-1.4	-25.7	14.	321.8	12.7
500.0	19420.	-8.3	-30.2	15.	306.3	9.7
450.0	22084.	-12.4	-33.6	15.	348.8	14.4
400.0	25004.	-18.2	-36.6	18.	349.0	19.0
350.0	28230.	-25.4	-42.5	18.	352.3	25.3
300.0	31838.	-33.8	-49.3	19.	349.9	28.4
250.0	35938.	-44.5			350.7	30.2
200.0	40724.	-55.1			335.8	32.4
175.0	43488.	-60.1			328.6	32.5
150.0	46611.	-64.5			316.6	40.4
125.0	50229.	-68.6			334.1	50.4
100.0	54594.	-71.1			327.0	48.2
80.0	58976.	-66.4			346.0	24.9
70.0	61634.	-66.5			48.5	15.0
60.0	64725.	-64.1			.6	14.8
50.0	68448.	-57.3			353.8	14.0
40.0	73103.	-54.8			61.5	5.1
30.0	79184.	-51.6				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.